03060101-090

(Eighteenmile Creek/Lake Hartwell)

General Description

Watershed 03060101-090 is located in Pickens and Anderson Counties and consists primarily of ***Eighteenmile Creek*** and its tributaries, which form an arm of ***Lake Hartwell***. The watershed occupies 38,085 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil-Hiwassee series. The erodibility of the soil (K) averages 0.26, and the slope of the terrain averages 9% with a range of 2-25%. Land use/land cover in the watershed includes: 68.2% forested land, 15.6% agricultural land, 13.9% urban land, 1.1% forested wetland, 0.7% water, and 0.5% barren land.

Eighteenmile Creek originates near the City of Easley and accepts drainage from Woodside Branch and Fifteenmile Creek, before forming an arm of Lake Hartwell. There are a total of 58.5 stream miles and 284.7 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

Station #	Type	Class	Description
SV-017	S	FW	EIGHTEENMILE CREEK AT UNNUMBERED COUNTY RD, 2.25 MI SSW OF EASLEY
SV-241	S	FW	WOODSIDE BRANCH AT US 123, 1.5 MI E OF LIBERTY
SV-245	S	FW	EIGHTEENMILE CREEK AT S-39-27, 3.3 MI S OF LIBERTY
SV-135	P/BIO	FW	EIGHTEENMILE CREEK AT S-39-93, S OF CENTRAL
SV-268	P	FW	EIGHTEENMILE CREEK AT 2-04-1098

Eighteenmile Creek - There are four monitoring sites along Eighteenmile Creek. Aquatic life uses are fully supported at the upstream site ***(SV-017)***. A significant increasing trend in dissolved oxygen concentration and significant decreasing trend in five-day biochemical oxygen demand suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal coliform bacteria excursions.

Aquatic life uses are also fully supported at the next site downstream ***(SV-245)***. A significant increasing trend in dissolved oxygen concentration and significant decreasing trends in five-day biochemical oxygen demand and turbidity suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal coliform bacteria excursions.

Further downstream ***(SV-135)***, aquatic life uses are fully supported based on macroinvertebrate community data. A significant increasing trend in dissolved oxygen concentration and significant decreasing trend in five-day biochemical oxygen demand suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal coliform bacteria excursions. In addition, there is a significant increasing trend in fecal coliform bacteria concentration.

At the furthest downstream site ***(SV-268),*** aquatic life uses are not supported due to excursions in pH, total phosphorus, and chlorophyll-*a*. There are also significant increasing trends in five-day biochemical oxygen demand and pH. A significant increasing trend in dissolved oxygen concentration and significant decreasing trend in turbidity suggest improving conditions for these parameters. In

sediments, a high concentration of zinc was detected in the 1996 sample. Recreational uses are partially supported at this site due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Woodside Branch (SV-241) - Aquatic life uses are fully supported. There is a significant decreasing trend in pH. A significant increasing trend in dissolved oxygen concentration and significant decreasing trends in five-day biochemical oxygen demand and turbidity suggest improving conditions for these parameters. Recreational uses are partially supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

A fish consumption advisory has been issued by the Department for PCBs (Polychlorinated biphenols) and includes the impounded area (Lake Hartwell) of Eighteenmile Creek within this watershed (see advisory p.37).

NPDES Program

Active NPDES Facilities

RECEIVING STREAM ***FACILITY NAME*** ***PERMITTED FLOW @ PIPE (MGD)***	***NPDES#*** ***TYPE*** ***COMMENT***
EIGHTEENMILE CREEK MILLIKEN & CO./PENDLETON FINISHING PIPE #: 001 FLOW: M/R	SC0000477 MAJOR INDUSTRIAL
EIGHTEENMILE CREEK TOWN OF PENDLETON-CLEMSON REG. WWTP PIPE #: 001 FLOW: 2.0	SC0035700 MAJOR DOMESTIC
EIGHTEENMILE CREEK PICKENS COUNTY/18MILE CK UPPER REG. WWTP PIPE #: 001 FLOW: 1.0	SC0042994 MAJOR DOMESTIC
EIGHTEENMILE CREEK PICKENS COUNTY/18MILE CK MIDDLE REG. WWTP PIPE #: 001 FLOW: 1.0	SC0047856 MAJOR DOMESTIC
EIGHTEENMILE CREEK TRIBUTARY HEATHERWOOD SD/MADERA UTIL. PIPE #: 001 FLOW: 0.072	SC0029548 MINOR DOMESTIC
EIGHTEENMILE CREEK TRIBUTARY MCKECHNIE PLASTIC COMPONENTS PIPE #: 001 FLOW: M/R	SCG250077 MINOR INDUSTRIAL
WOODSIDE BRANCH LIBERTY DENIM LLC PIPE #: 001 FLOW: M/R	SC0000264 MAJOR INDUSTRIAL

Nonpoint Source Management Program

Land Disposal Activities

Landfill Facilities

LANDFILL NAME *FACILITY TYPE*	*PERMIT #* *STATUS*
TOWN OF PENDLETON MSW LANDFILL DOMESTIC	041001-1103 CLOSED
ANDERSON COUNTY LANDFILL DOMESTIC	DWP-048; DWP-115 CLOSED
ANDERSON COUNTY LANDFILL DOMESTIC	042401-6001 ACTIVE
TOWN OF PICKENS CENTRAL LANDFILL DOMESTIC	391001-1102; DWP-057 CLOSED
CITY OF CLEMSON BRUSH RECYCLING DOMESTIC	DWP-018 CLOSED
CLEMSON UNIVERSITY LANDFILL INDUSTRIAL	IWP-129 (SCD980079420) CLOSED
CLEMSON SLUDGE FARM INDUSTRIAL	IWP-206 CLOSED
WACCAMAW LANE LAND CLEARING LANDFILL C & D	392603-1701 INACTIVE
EASLEY BUILDERS SUPPLY LANDFILL C & D	392639-1701 INACTIVE

Mining Activities

MINING COMPANY *MINE NAME*	*PERMIT #* *MINERAL*
PICKENS COUNTY LIBERTY BORROW SITE	1351-77 CLAY

Growth Potential

There is a moderate to high potential for growth in this watershed, which contains portions of the Cities of Easley and Clemson and the Towns of Liberty, Norris, Central, and Pendleton. A residential growth trend extends eastward from Clemson to Central, Liberty, and Easley along S.C. Hwy 93 and U.S. Hwy 123. Commercial growth is predicted between Easley and Pickens along S.C. Hwy 8. The City of Easley has the greatest potential for commercial growth due to its proximity to S.C. 93, 153, and 8 and U.S. 123.

Industrial growth in this watershed is due, in part, to the established infrastructure and transportation system, and the proximity to I-85. The topography of Easley is most conducive to industrial development and gives it the highest potential for growth in this area. The Town of Liberty

also has a high potential for industrial growth due to the large tracts in the Liberty vicinity that are projected to develop, pending the construction of new or expanded sewage disposal plants in the area. Construction of these will encourage growth along the U.S. 123 corridor as well. The Town of Pendleton is also projected for industrial growth along the U.S. Hwy 76 corridor from Pendleton to Anderson. In addition, a rail line runs through Pendleton to Seneca, a criterion for siting a new industry.